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RAW SEQUENCE LISTING

DATE: 03/26/2002

PATENT APPLICATION: US/10/092,880

TIME: 13:16:51

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF3\03262002\J092880.raw

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3 <110> APPLICANT: Barenkamp, Stephen J.
5 <120> TITLE OF INVENTION: HIGH MOLECULAR WEIGHT SURFACE PROTEINS OF NON-TYPEABLE
6   HAEMOPHILUS
W--> 8 <130> FILE REFERENCE:
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/092,880
C--> 11 <141> CURRENT FILING DATE: 2002-03-08
13 <150> PRIOR APPLICATION NUMBER: 09/155,614
14 <151> PRIOR FILING DATE: 1998-09-30
16 <150> PRIOR APPLICATION NUMBER: 08/617,697
17 <151> PRIOR FILING DATE: 1996-04-01
19 <150> PRIOR APPLICATION NUMBER: PCT/US97/04707
20 <151> PRIOR FILING DATE: 1997-04-01
22 <160> NUMBER OF SEQ ID NOS: 11
24 <170> SOFTWARE: PatentIn Ver. 2.1
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 5116
28 <212> TYPE: DNA
29 <213> ORGANISM: Haemophilus influenzae
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34 atggtataat ctttcattct tcattcttca tctttcatct ttcattcttc atctttcatc 180
35 tttcatcttt catctttcat ctttcattct tcattcttca tctttcatct ttcattcttc 240
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39 ggggttgtga ccattccaca gaaaaaggca gcgaaaaacc tgctcgcatg aaagtgcgtc 480
40 acttagcggt aaagccactt tccgctatgt tactatcttt aggtgtaaca tctattccac 540
41 aatctgtttt agcaagcggc ttacaaggaa tggatgtagt acacggcaca gccactatgc 600
42 aagtagatgg taataaaacc attatccgca acagtgttga cgatatcatt aattggaaac 660
43 aatttaacat cgaccaaagt gaaatgggtc agtttttaca agaaaacaac aactccgccg 720
44 tattcaaccg tgttacatct aaccaaactc cccaattaaa agggatttta gattctaacg 780
45 gacaagtctt tttaatcaac ccaaatggta tcacaatagg taaagacgca attattaaca 840
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62 acacaactct tgagagtata ctaaaaaaag gtaccttgtg taacatcact gctaatcaac 1860
63 gcatctatgt caatagctcc attaatattt ccaatggcag cttaactctt tggagtggag 1920
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103 aaggagctgc aaccttaact acatcatcgg gcaaatcaac taccgaagct agttcacaca 4320
104 ttacttcagc caagggtcag gtaaatcttt cagctcagga tggtagcggt gcaggaaagta 4380

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108 tcgcgacaac ctcaagcaga gtgaacatca ctggggattt aatcacaata aatggattaa 4620
109 atatcatttc aaaaaacggg ataaacaccg tactgttaaa aggcgttaaa attgatgtga 4680
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130 20 25 30
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133 35 40 45
135 Pro Leu Ser Ala Met Leu Leu Ser Leu Gly Val Thr Ser Ile Pro Gln
136 50 55 60
138 Ser Val Leu Ala Ser Gly Leu Gln Gly Met Asp Val Val His Gly Thr
139 65 70 75 80
141 Ala Thr Met Gln Val Asp Gly Asn Lys Thr Ile Ile Arg Asn Ser Val
142 85 90 95
144 Asp Ala Ile Ile Asn Trp Lys Gln Phe Asn Ile Asp Gln Asn Glu Met
145 100 105 110
147 Val Gln Phe Leu Gln Glu Asn Asn Asn Ser Ala Val Phe Asn Arg Val
148 115 120 125
150 Thr Ser Asn Gln Ile Ser Gln Leu Lys Gly Ile Leu Asp Ser Asn Gly
151 130 135 140
153 Gln Val Phe Leu Ile Asn Pro Asn Gly Ile Thr Ile Gly Lys Asp Ala
154 145 150 155 160
156 Ile Ile Asn Thr Asn Gly Phe Thr Ala Ser Thr Leu Asp Ile Ser Asn
157 165 170 175
159 Glu Asn Ile Lys Ala Arg Asn Phe Thr Phe Glu Gln Thr Lys Asp Lys
160 180 185 190
162 Ala Leu Ala Glu Ile Val Asn His Gly Leu Ile Thr Val Gly Lys Asp
163 195 200 205
165 Gly Ser Val Asn Leu Ile Gly Gly Lys Val Lys Asn Glu Gly Val Ile
166 210 215 220
168 Ser Val Asn Gly Gly Ser Ile Ser Leu Leu Ala Gly Gln Lys Ile Thr
169 225 230 235 240
171 Ile Ser Asp Ile Ile Asn Pro Thr Ile Thr Tyr Ser Ile Ala Ala Pro

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177	Ile Asn Val	Arg Ala Ala Thr Ile Arg Asn Gln Gly Lys	Leu Ser Ala			
178		275		280		285
180	Asp Ser Val	Ser Lys Asp Lys Ser Gly Asn Ile Val Leu Ser Ala Lys				
181		290		295		300
183	Glu Gly Glu	Ala Glu Ile Gly Gly Val Ile Ser Ala Gln Asn Gln Gln				
184	305		310		315	320
186	Ala Lys Gly	Gly Lys Leu Met Ile Thr Gly Asp Lys Val Thr Leu Lys				
187		325		330		335
189	Thr Gly Ala	Val Ile Asp Leu Ser Gly Lys Glu Gly Gly Glu Thr Tyr				
190		340		345		350
192	Leu Gly Gly	Asp Glu Arg Gly Glu Gly Lys Asn Gly Ile Gln Leu Ala				
193		355		360		365
195	Lys Lys Thr	Ser Leu Glu Lys Gly Ser Thr Ile Asn Val Ser Gly Lys				
196		370		375		380
198	Glu Lys Gly	Gly Arg Ala Ile Val Trp Gly Asp Ile Ala Leu Ile Asp				
199	385		390		395	400
201	Gly Asn Ile	Asn Ala Gln Gly Ser Gly Asp Ile Ala Lys Thr Gly Gly				
202		405		410		415
204	Phe Val Glu	Thr Ser Gly His Asp Leu Phe Ile Lys Asp Asn Ala Ile				
205		420		425		430
207	Val Asp Ala	Lys Glu Trp Leu Leu Asp Phe Asp Asn Val Ser Ile Asn				
208		435		440		445
210	Ala Glu Thr	Ala Gly Arg Ser Asn Thr Ser Glu Asp Asp Glu Tyr Thr				
211		450		455		460
213	Gly Ser Gly	Asn Ser Ala Ser Thr Pro Lys Arg Asn Lys Glu Lys Thr				
214	465		470		475	480
216	Thr Leu Thr	Asn Thr Thr Leu Glu Ser Ile Leu Lys Lys Gly Thr Phe				
217		485		490		495
219	Val Asn Ile	Thr Ala Asn Gln Arg Ile Tyr Val Asn Ser Ser Ile Asn				
220		500		505		510
222	Leu Ser Asn	Gly Ser Leu Thr Leu Trp Ser Glu Gly Arg Ser Gly Gly				
223		515		520		525
225	Gly Val Glu	Ile Asn Asn Asp Ile Thr Thr Gly Asp Asp Thr Arg Gly				
226		530		535		540
228	Ala Asn Leu	Thr Ile Tyr Ser Gly Gly Trp Val Asp Val His Lys Asn				
229	545		550		555	560
231	Ile Ser Leu	Gly Ala Gln Gly Asn Ile Asn Ile Thr Ala Lys Gln Asp				
232		565		570		575
234	Ile Ala Phe	Glu Lys Gly Ser Asn Gln Val Ile Thr Gly Gln Gly Thr				
235		580		585		590
237	Ile Thr Ser	Gly Asn Gln Lys Gly Phe Arg Phe Asn Asn Val Ser Leu				
238		595		600		605
240	Asn Gly Thr	Gly Ser Gly Leu Gln Phe Thr Thr Lys Arg Thr Asn Lys				
241		610		615		620
243	Tyr Ala Ile	Thr Asn Lys Phe Glu Gly Thr Leu Asn Ile Ser Gly Lys				
244	625		630		635	640

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250           660           665           670
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253           675           680           685
255 Gly Thr Leu Thr Gln Pro Tyr Asn Leu Asn Gly Ile Ser Phe Asn Lys
256           690           695           700
258 Asp Thr Thr Phe Asn Val Glu Arg Asn Ala Arg Val Asn Phe Asp Ile
259 705           710           715           720
261 Lys Ala Pro Ile Gly Ile Asn Lys Tyr Ser Ser Leu Asn Tyr Ala Ser
262           725           730           735
264 Phe Asn Gly Asn Ile Ser Val Ser Gly Gly Gly Ser Val Asp Phe Thr
265           740           745           750
267 Leu Leu Ala Ser Ser Ser Asn Val Gln Thr Pro Gly Val Val Ile Asn
268           755           760           765
270 Ser Lys Tyr Phe Asn Val Ser Thr Gly Ser Ser Leu Arg Phe Lys Thr
271           770           775           780
273 Ser Gly Ser Thr Lys Thr Gly Phe Ser Ile Glu Lys Asp Leu Thr Leu
274 785           790           795           800
276 Asn Ala Thr Gly Gly Asn Ile Thr Leu Leu Gln Val Glu Gly Thr Asp
277           805           810           815
279 Gly Met Ile Gly Lys Gly Ile Val Ala Lys Lys Asn Ile Thr Phe Glu
280           820           825           830
282 Gly Gly Asn Ile Thr Phe Gly Ser Arg Lys Ala Val Thr Glu Ile Glu
283           835           840           845
285 Gly Asn Val Thr Ile Asn Asn Ala Asn Val Thr Leu Ile Gly Ser
286           850           855           860
288 Asp Phe Asp Asn His Gln Lys Pro Leu Thr Ile Lys Lys Asp Val Ile
289 865           870           875           880
291 Ile Asn Ser Gly Asn Leu Thr Ala Gly Gly Asn Ile Val Asn Ile Ala
292           885           890           895
294 Gly Asn Leu Thr Val Glu Ser Asn Ala Asn Phe Lys Ala Ile Thr Asn
295           900           905           910
297 Phe Thr Phe Asn Val Gly Gly Leu Phe Asp Asn Lys Gly Asn Ser Asn
298           915           920           925
300 Ile Ser Ile Ala Lys Gly Gly Ala Arg Phe Lys Asp Ile Asp Asn Ser
301           930           935           940
303 Lys Asn Leu Ser Ile Thr Thr Asn Ser Ser Ser Thr Tyr Arg Thr Ile
304 945           950           955           960
306 Ile Ser Gly Asn Ile Thr Asn Lys Asn Gly Asp Leu Asn Ile Thr Asn
307           965           970           975
309 Glu Gly Ser Asp Thr Glu Met Gln Ile Gly Gly Asp Val Ser Gln Lys
310           980           985           990
312 Glu Gly Asn Leu Thr Ile Ser Ser Asp Lys Ile Asn Ile Thr Lys Gln
313           995           1000           1005
315 Ile Thr Ile Lys Ala Gly Val Asp Gly Glu Asn Ser Asp Ser Asp Ala
316           1010           1015           1020
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L:8 M:201 W: Mandatory field data missing, FILE REFERENCE

L:10 M:270 C: Current Application Number differs, Replaced Application Number

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date